UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

MEMORANDUM

DATE: 28 March 2005

SUBJECT: Time-Critical Removal Action at Oahu Sugar Site, Waipio Peninsula, Pearl Harbor Naval Complex

FROM: Lewis Mitani, Remedial Project Manager 3/23/05
Federal Facility Section (SFD-8-3)

THROUGH: John Chesnutt, Chief 3/23/05
Federal Facility Section (SFD-8-3)

TO: Kathleen Johnson, Chief
Federal Facility & Site Assessment Branch (SFD-8)

I. PURPOSE

The purpose of this Action Memorandum (AM) is to request and document for the administrative record the proposed removal action described for the Oahu Sugar (OSCO) Site (the Site), Waipio Peninsula, Oahu, Hawai'i. The OSCO Site is located on the Pearl Harbor Naval Complex, a federal facility. This removal action is being conducted under the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA), 42 U.S.C. § 9604(a)(1), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR § 300.415.

The proposed removal action consists of characterization of the footprint of the dioxin contamination in surface soil and an interim cap of the area of contamination.

II. SITE CONDITIONS AND BACKGROUND

Site Status:	NPL
Category of Removal:	Time-Critical
CERCLIS ID:	HI4170090076
SITE ID:	091S Operable Unit 18

A. Site Description

1. Physical Location

The Site is located on the Pearl Harbor Naval Complex Superfund Site at 21° 21' 44.7" north latitude and 157 ° 59' 23.7" west longitude, Waipio Peninsula, Waipahu, Hawaii.

2. Site Characteristics

The Site is owned by the United States Department of Defense ("DOD"), Department of the Navy (DON) and formerly housed the pesticide mixing plant for the Oahu Sugar Company, LLC ("OSCO"). Covering approximately 3.5 acres, the Site is currently fenced. The Site was part of land leased by OSCO from the DON to grow sugar cane. OSCO discontinued operations at the Site in the 1980s and terminated its lease with the DON in the 1990s.

The Site was formerly used to mix pesticide and/or fertilizer solutions, which were then loaded into backpacks, trucks or airplanes for application to the surrounding sugar cane fields. Former OSCO personnel reported that dry pentachlorophenol (PCP) powder was mixed with water and diesel fuel in aboveground storage tanks (ASTs). 4,4'-dichlorodiphenyltrichloroethane (DDT) and its breakdown products have also been found at the Site. The primary release mechanism is believed to be spillage onto surface soils during pesticide and fertilizer mixing and loading, and possibly spillage from the former ASTs. These spills then percolated through surface soils into subsurface soils and groundwater, primarily in the vicinity of the ASTs. Secondary releases from surface water and sediment runoff and from airborne dust transport are also assumed to occur.

The Site ranges from approximately 5 to 20 feet above mean sea level. The western portion of the Site, approximately 90 percent of the area, is about 5 feet above mean sea level. This portion of the Site is cut by an approximately 4-foot deep unlined drainage ditch that runs north/south through the Site. An airstrip, an unpaved road, a Quonset hut, and several ASTs were formerly located in the western portion of the Site. The eastern 10 percent of the Site rises to approximately 20 feet above mean sea level, above the limestone (calcareous reef deposits) cliff shown on Figure 2. The soils in the western part of the Site consist of alluvial soils (Mamala stony silty clay loam), with some reported additions of dredged sediment and fill, including debris, trash, and off-site soils. The soils on top of the cliff developed in basaltic alluvium on top of coral limestone.

Groundwater is present between 3.5 and 7.5 feet below ground surface (bgs) on the lower portion of the Site and is tidally influenced. The western portion of the Site is reportedly inundated at high tide. During the Remedial Investigation (RI; BES, 2002), the groundwater flow direction was found to be southerly at a gradient of 0.02 feet per